

Notice of Allowability

Application No.

10/761,136

Examiner

Jason M. Perilla

Applicant(s)

NEUMANN ET AL.

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed October 17, 2007.
2. ☒ The allowed claim(s) is/are claims 1 and 3-12 renumbered respectively as claims 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20071127.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. Claims 1 and 3-12 are pending in the instant application.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lee Johnson on November 26, 2007.

The application has been amended as follows wherein the following versions of claims 3, 4, and 6-8 are replace all prior versions in their entirety:

3. Signal delaying device according to claim 1, characterized in that the interpolation element checks whether the marking has arrived at the output of the memory element, and ~~following this~~ if so, reads out a sampled value ($x(k)$) from the memory element and also a sampled value from the register.

4. Signal delaying device according to claim 1, ~~comprising a register having its output side connected to the input side of the interpolation element for the intermediate storage of at least one sampled value ($S_{in}(k)$) of the input signal and arranged in parallel to the memory element,~~ wherein the interpolation element comprises a polyphase filter.

6. Method for the dynamic delaying of a digitally sampled input signal with the following procedural stages:

- storing sampled values of the input signal in a memory element,
- ~~reading out of~~ the sampled values ($S_{in}(k)$) from the memory element,

- interpolating the sampled values ($x(k)$) read out from the memory element, wherein
- whenever the a range defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is neither undercut nor exceeded in the interpolation, one sampled value ($S_{in}(k)$) is placed into the memory element and one sampled value ($x(k)$) is read out from the memory element,
- whenever the range defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is exceeded in the interpolation, no new sampled value ($x(k)$) is read out from the memory element,
- before the range defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is undercut in the interpolation, placing a sampled value ($S_{in}(k)$) of the input signal in intermediate storage in a register arranged in parallel to the memory element, marking the next sampled value ($S_{in}(k+1)$) of the input signal and storing it stored in the memory element, and reading out a sampled value(s) from the memory element, and, whenever the marked sampled value arrives at the output of the memory element, reading also the sampled value placed in intermediate storage in the register, whenever the marked sampled value arrives at the output of the memory element.

7. Method according to claim 6, wherein the range defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is exceeded, if at least two interpolation values ($S_{out}(k-3)$, $S_{out}(k-2)$) produced by the interpolation fall within this the range of the two successive sampled values.

8. Method according to claim 6 or 7, wherein the range defined by two successive sampled values ($x(k-4)$, $x(k-3)$) is undercut in the interpolation, if no interpolation value produced by the interpolation falls within this the range of the two successive sampled values.

Claims 1 and 3-12 are renumbered respectively as claims 1-11, and the claim dependency is renumbered accordingly.

Allowable Subject Matter

3. Claims 1 and 3-12 renumbered respectively as claims 1-11 are allowed.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Perilla whose telephone number is (571) 272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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November 27, 2007

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